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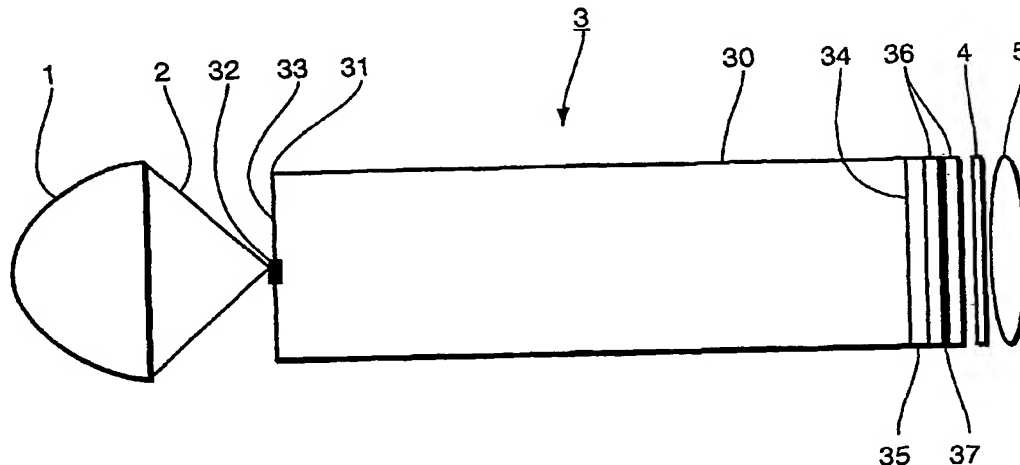
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[Continued on next page]

(54) Title: PROJECTION DEVICE HAVING AN INCREASED EFFICIENCY



(57) Abstract: The invention relates to a projection device for projecting an image, comprising a light source (1), a LCD projection subsystem (3) and a projection means (4, 5) for projecting the image. A small-sized and low-cost projection device is proposed wherein said projection subsystem comprises: a waveguide integrator (30) for guiding light from an entrance (31) to an exit (34), the inner entrance surface (33) of said integrator (30) being coated with a reflective material and having a hole (32) for coupling light emitted from said light source (1) into said integrator (30), a reflective polarizer (35) provided at the exit surface (34) of said integrator (30) for reflecting light having the wrong polarization back into said integrator (30), a transmissive LCD (36) provided at the exit of said reflective polarizer (35) for modulating the light transmitted by said polarizer (35), said LCD (36) having an integrated reflective color filter array (37) for reflecting light having the wrong color back into said integrator (30).

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ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI,
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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, INSPEC

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 889 567 A (GALE RONALD P ET AL) 30 March 1999 (1999-03-30) cited in the application figure 19	1, 9, 10
A	EP 0 373 822 A (HUGHES AIRCRAFT CO) 20 June 1990 (1990-06-20) column 5, line 15 - line 18; figure 5	1, 9, 10

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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